

# **DIGITAL LED CONTROLLER**

**< PD-FN300(RC)-8CH >**

**-SPEC & MANUAL -**

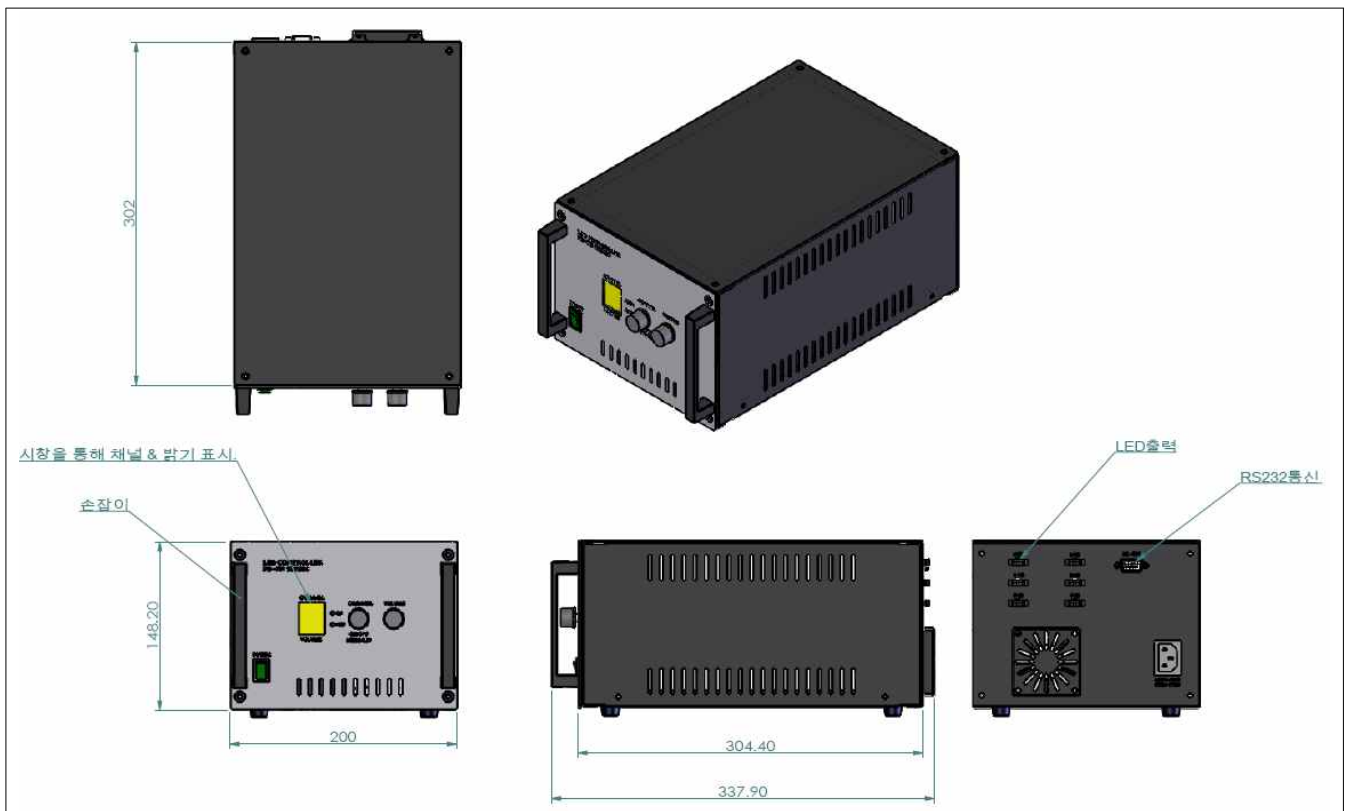
Ver 1

# - PD-FN300(RC)-8CH -

## 1. SPEC

MODEL.	PD-FN300(RC)-8CH
Channel	8
LED OUT	8
MODE	Current Control
Vout Range	3~5V
Iout Range	0~2400mA.
Control Function	Manual & RS232, Bright 0~255 Step, ON/OFF Control.
Input Voltage	AC110~220V(50Hz/60Hz)
MAX POWER	300W
Communication mode	RS-232
OUT CONNECTOR	SMP-03V-BC(JST) 1: LED+ 2: LED-, 3: N.C
SIZE	200 X 170 X 340

## \*DIMENSION Diagrams.



## 2. LED out Pin\_Map.

### \* PIN\_MAP(LED Controller Out)

1CH LED OUT	
1	LED 1+
2	LED 1-
3	N.C

2CH LED OUT	
1	LED 2+
2	LED 2-
3	N.C

3CH LED OUT	
1	LED 3+
2	LED 3-
3	N.C

4CH LED OUT	
1	LED 4+
2	LED 4-
3	N.C

### \* PIN\_MAP(LED Guide Cable).

– Connector : "SMR-03V-BC" TO "SMP-02V-BC"

– Cable Length : 3M.

SMR-03V-BC	
1	LED+
2	LED-
3	N.C

TO

SMP-02V-BC	
1	LED+
2	LED-

### 3. RS232 PROTOCOL.

#### 3.1 PROTOCOL

*RS-232 PIN_MAP (DSUB 9PIN-MALE)	*UART(RS232) SPEC.								
	<table border="1"> <tr> <td>Baud Rate</td> <td>9600bps</td> </tr> <tr> <td>DATA BIT</td> <td>8BIT(ASCII)</td> </tr> <tr> <td>STOP Bit</td> <td>1Bit</td> </tr> <tr> <td>Parity Bit</td> <td>None Parity Bit</td> </tr> </table>	Baud Rate	9600bps	DATA BIT	8BIT(ASCII)	STOP Bit	1Bit	Parity Bit	None Parity Bit
Baud Rate	9600bps								
DATA BIT	8BIT(ASCII)								
STOP Bit	1Bit								
Parity Bit	None Parity Bit								

### < PC ----> LED Controller >

#### 3.2.1 Channel DATA Control.

C	n1	n2	n3	CR	LF
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- \* C : command
- \* n1 : 1~9, A~G(10~16) Channel Number, T => All Channel
- \* n2 : Send DATA HIGH NIBBLE(0~F)
- \* n3 : Send DATA LOW NIBBLE(0~F)

EX) Channel Bright Control => C1FF[CR][LF]

All Channel Bright Control => CTFF[CR][LF]

- RETURN

R	n1	n2	n3	CR	LF
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예) R1FF[CR][LF], RTFF[CR][LF]

#### 3.2.2 Channel ON/OFF

H	n1	n2	n3	CR	LF
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- \* H : command
- \* n1 : 1~9, A~G(10~16) Channel Number.
- \* n2,n3 : "ON", "OF"

EX) Channel ON/OFF Control => H1ON[CR][LF], H1OF[CR][LF]

All Channel ON/OFF Control => HTON[CR][LF], HTOF[CR][LF]

- RETURN

R	n1	n2	n3	CR	LF
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EX) R1OK[CR][LF], R1ER[CR][LF]

### 3.2.3 Confirmation of the State.

S	n1	n2	n3	CR	LF
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\* S : Command.

\* n1: 1~9, A~G(10~16) . Channel Number.

\*n2, n3 : "00" => Bright, "01" => ON/OFF, "02" => Error

EX) Bright => S100[CR][LF]

ON/OFF => S101[CR][LF]

ERROR => S102[CR][LF]

- RETURN

R	n1	n2	n3	CR	LF
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EX) Bright => R1FF[CR][LF]

ON/OFF => R1ON[CR][LF], R1OF[CR][LF]

ERROR => R1OK[CR][LF], R1ER[CR][LF]

## < LED Controller ----> PC >

### 3.4.1 DATA or ON/OFF

R	n1	n2	n3	CR	LF
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- DATA Control

\* n1 : 1~9, A~G(10~16), Channel Num.

\* n2 : High DATA NIBBLE(0~F)

\* n3 : Low DATA NIBBLE(0~F)

EX) R100[CR][LF], R1FF[CR][LF]

- ON/OFF Control

\* n2, n3 : ON/OFF

EX) R1ON[CR][LF], R1OF[CR][LF]

### 3.4.2 LED ERROR(Normality => Error)

R	n1	E	R	CR	LF
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\* n1 : 1 ~ 9, A~G(10~16) Channel Num.

EX) R1ER[CR][LF]

### 3.4.3 LED ERROR(Error => Normality)

R	n1	O	K	CR	LF
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\* n1 : 1~9, A~G(10~16) Channel Num.

EX) R1OK[CR][LF]